

CATALOGUE

OF THE

State Agricultural & Mechanical College,

AUBURN, LEE COUNTY, ALA.

1877-8.



MONTGOMERY, ALA. :

BARRETT & BROWN, STEAM BOOK AND JOB PRINTERS AND BINDEES.

1878.

BOARD OF TRUSTEES.

HIS EXCELLENCY, GEO. S. HOUSTON, *Governor of Alabama, ex-officio, President.*

HON. LEROY F. BOX, *Superintendent of Education, ex-officio.*

FIRST DISTRICT—HON. C. C. LANGDON.

SECOND DISTRICT—HON. B. S. BIBB.

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E. T. GLENN, TREASURER.

F. M. REESE, SECRETARY.

FACULTY AND OFFICERS.

1877-8.

REV. I. T. TICHENOR, D. D.,
President and Professor of Agriculture.

R. A. HARDAWAY, C. E., A. M.,
Commandant and Professor of Civil Engineering.

J. T. DUNKLIN, A. M.,
Professor of Ancient Languages.

WM. C. STUBBS, A. M.,
Professor of Chemistry.

OTIS D. SMITH, A. M.,
Professor of Mathematics.

*REV. B. B. ROSS, A. M.,
Professor of Moral Philosophy.

E. Q. THORNTON, A. M.,
Professor of Natural History and Modern Languages.

E. R. RIVERS, C. E., †B. H. JOHNSON, B. E.,
Instructors of Preparatory Department.

J. H. DRAKE, M. D.,
Surgeon.

E. T. GLENN,
Quartermaster.

WM. C. STUBBS, A. M.,
Secretary of Faculty.

E. Q. THORNTON, A. M.,
Librarian.

*Deceased.

†Elected for remainder of term after death of Professor Ross.

MILITARY ORGANIZATION.

Commandant :

COL. R. A. HARDAWAY.

Post Adjutant :

E. R. RIVERS.

CADET OFFICERS.

Adjutant :

R. E. HARDAWAY.

Sergeant-Major :

M. S. ANDREWS.

Quartermaster-Sergeant :

FRANK FLINN.

Color-Bearer :

J. S. DOWDELL.

Company A.

Captain :

G. H. PRICE.

First Lieutenant :

I. A. LANIER.

Second Lieutenant :

A. M. BUCHANAN.

Company B.

Captain :

R. L. THORNTON.

First Lieutenant :

S. C. DOWDELL.

Second Lieutenant :

J. A. CRAWFORD.

Company C.

Captain :

L. G. DAWSON.

First Lieutenant :

R. E. HARDAWAY.

Second Lieutenant :

W. H. BLAKE.

Company D.

Captain :

L. S. SCHIEFFELIN.

First Lieutenant :

T. H. FRAZER.

Second Lieutenant :

O. C. McGEHEE.

Alumni of East Alabama College.

1860.

W. F. GLENN.....	Newnan, Ga.
F. S. JOHNSON.....	_____
R. D. LUMSDEN.....	Crawfordville, Ga.
W. C. THRASH.....	Orrville, Ala.
A. F. WOOLEY.....	Kingston, Ga.

1861.

HENRY HARRIS.....	Sparta, Ga.
W. M. JONES.....	Social Circle, Ga.
SIDNEY LEWIS.....	Sparta, Ga.
R. S. McFARLANE.....	LaGrange, Ga.
S. W. McMICHAEL.....	Columbus, Ga.
H. P. PARK.....	Greenville, Ga.

1867.

J. R. DOWDELL.....	Opelika, Ala.
HOWARD HAMILL.....	Mexico, Mo.

1868.

W. W. MOORE.....	Birmingham, Ala.
W. T. PATILLO.....	Oak Bowery, Ala.

1869.

A. G. DOWDELL.....	La Fayette, Ala.
L. A. DOWDELL.....	Opelika, Ala.
A. S. DOUGLAS.....	Louisville, Ala.
LEANDER G. JACKSON.....	Longview, Texas.
T. J. LAMAR.....	Hamilton, Ga.
CALEB LINDSEY.....	Mobile, Ala.
J. R. MOTLEY.....	Tuskegee, Ala.
JAS. D. MYRICK.....	Midway, Ga.
R. C. PERSONS.....	Washington, D. C.

The Trustees and Faculty of Agricultural and Mechanical College of Alabama extend to the Alumni of the East Alabama College all the privileges of graduates in the former College.

ALUMNI OF AGRICULTURAL AND MECHANICAL COLLEGE.

1872.

R. E. BURT, A. M.....	Salem, Ala.
R. O. ROUNSAVALL, A. B.....	Huntsville, Texas.
W. E. HORNE, C. E.....	Union Springs, Ala.
L. V. ROSSER, A. B.....	Nashville, Tenn.
G. C. SPIGENER, A. B.....	Prattville, Ala.
C. R. WILLIAMSON, A. M.....	Demopolis, Ala.

1873.

J. L. GOLSON, B. L.....	New Orleans, La.
W. T. RUTLEDGE, B. L.....	Crawford, Ala.
P. R. RUTLEDGE, B. L.....	Crawford, Ala.

1874.

R. K. FITZHUGH, B. S.....	Augusta, Ark.
B. H. JOHNSON, B. E.....	Dadeville, Ala.
W. H. MOORE, B. L.....	Salem, Ala.
M. H. MOORE, B. L.....	Plano, Texas.

1875.

FRANK C. DILLARD, B. S.....	Hopkinsville, Ky.
WM. M. PERRY, B. S.....	Columbus, Ga.
JNO. A. RATCHFORD, B. S.....	La Fayette, Ala.
EUGENE R. RIVERS, C. E.....	Glennville, Ala.

1876.

M. K. CLEMENTS, B. Ag.....	Clay County, Ala.
COL. T. HODGE, B. Ag.....	Salem, Ala.
L. B. HOLT, B. Ag.....	Siluria, Ala.
F. D. PEABODY, B. Ag.....	Hopkinsville, Ky.
J. E. RUFFIN, B. Ag.....	Rockford, Ala.
P. H. STOW, B. E.....	Mobile, Ala.
REESE WILSON, B. Ag.....	Salem, Ala.

CATALOGUE OF STUDENTS.

(BY CLASSES AND COURSES.)

Sc. stands for Course in Science; Ag. Agriculture; C. E. Civil Engineering; L. Letters;
P. Partial Course.

GRADUATES—CLASS OF 1877.

RIDDLE, SAMUEL CORBETT, B. L. Pilot Point, Texas.
THACH, CHARLES COLEMAN, B. E. Athens, Alabama.
TRAMMELL, JOHN MELTON, B. E. Chambers county, Alabama.
TRAMMELL, WILLIAM OLIVER, B. E. “ “ “

FIRST CLASS.

DAWSON, LEMUEL GULIVER, C. E. Elmore county, Alabama.
DOWDELL, SILAS CHARLES, Sc. Auburn, Alabama.
FRAZER, TUCKER HENDERSON, C. E. “ “
HARDAWAY, ROBERT EARLY, C. E. “ “
LANIER, ISAAC ALEXANDER, C. E. Huntsville, Alabama.
PRICE, GEORGE HUNTER, C. E. “ “
SCHIEFFELIN, LEE STARKE, C. E. Mobile, Alabama.
THORNTON, REUBEN LOXLA, C. E. Tuskegee, Alabama.

SECOND CLASS.

ANDREWS, MARK SAMUEL, L. Auburn, Alabama.
BLAKE, WYATT HEFLIN, Sc. Cleburne county, Alabama.
BUCHANAN, ABNER M., Ag. Russell county, Alabama.
CRAWFORD, JAMES ALEXANDER, C. E. Coosa “ “
DILLARD, FRANK BARTOW, C. E. Auburn, Alabama.
DOWDELL, JOSHUA SILAS, L. Chambers county, Alabama.
DRAKE, VOLNEY MITCHELL, Auburn, Alabama.
FLINN, FRANK B., C. E. Montgomery county, Alabama.
HARVEY, ADDISON REESE, Sc. Auburn, Alabama.
MCGEHEE, OLIVER CLARK, Sc. Montgomery county, Alabama.
O'HARA, ALLEN BARTHOLOMEW, C. E. Chambers county, Alabama.
OLIVER, THOMAS McCARTY, Ag. Auburn, Alabama.
PERRY, HENRY GAITHER, L. “ “
PINCKARD, JOHN OSCAR, C. E. Randolph county, Alabama.
WIMBERLY, LEWIS THEODORE, C. E. Lee county, Alabama.
WOOD, WYATT WILLIAM, Sc. Cleburne county, Alabama.

THIRD CLASS.

ADAMS, MAXWELL.....	Tallapoosa county, Alabama.
ALLEN, JAMES WINGFIELD.....	Bullock county, Alabama.
ALSTON, J. K.....	Winnsboro, South Carolina.
ANDREWS, GLENN.....	Auburn, Alabama.
ATKINSON, BENJAMIN F.....	West Point, Georgia.
CANTEY, JOHN.....	Russell county, Alabama.
CANTEY, SAMUEL BENTON.....	“ “ “
CHAPMAN, WILLIAM.....	Coosa county, Alabama.
COLE, JESSE EUGENE.....	Mobile, Alabama.
DAVIS, JOHN STEPHEN NEAL.....	Lee county, Alabama.
DAVISON, JOHN TOLBERT.....	Pike county, “
DEAN, S. A.....	Tallapoosa county, Alabama.
ELLERSON, S. T.....	Ellerslie, Georgia.
FITZPATRICK, ALVA.....	Union Springs, Alabama.
GUINN, J. W.....	Jackson county, “
HALL, G. R.....	Bullock county, “
HENDERSON, WILLIAM S.....	Talladega county, “
HODGE, W. H.....	Lee county, Alabama.
HURT, JAMES M.....	Auburn, Alabama.
KNOWLES, HENRY C.....	“ “
LIPSCOMB, ANDREW DOWDELL.....	Nashville, Tennessee.
MORRIS, CHARLES THOMAS.....	Fort Gaines, Georgia.
MARTIN, HARRISON LAFAYETTE.....	Henry county, Alabama.
MCGRAW, W. N.....	Lee county, “
MCCOY, CHARLES.....	Opelika, Alabama.
ORUM, WILLIAM JOSEPH.....	Bullock county, Alabama.
PACE, S. B.....	Lee county, Alabama.
*PARKMAN, CHARLES SERENO.....	Dadeville, “
PAYNE, HOWARD ALLEN.....	Auburn, Alabama.
PRICE, EDWIN ARMSTRONG.....	Huntsville, Alabama.
SAMFORD, CRAWFORD ALEXANDER LIPSCOMB.....	Auburn, “
SHACKELFORD, J.....	Lawrence county, Alabama.
SHERROD, F. E.....	“ “ “
SHIPP, J. E. D.....	Cusseta, Georgia.
SMITH, ISAAC R.....	Bullock county, Alabama.
SMITH, P. CHANCEY.....	Montgomery, Alabama.
SPINKS, J. W.....	Tallapoosa county, Alabama.
STEVENS, GEORGE W.....	Randolph county, “
STREET, JABEZ CURRY.....	Clay county, Alabama.
STREET, ROBERT Y.....	“ “ “
STURDIVANT, T. P.....	Tallapoosa county, Alabama.
SYKES, J. J.....	Lawrence county, “
THOMAS, E. B.....	Tallapoosa county, Alabama.
THOMAS, J. A.....	“ “ “
THOMAS, R. E.....	“ “ “

*Deceased.

TWEEDY, R. H.....	Lawrence county, Alabama.
TURNER, GEORGE WASHINGTON.....	Elmore county, Alabama.
URQUHART, H. B.....	Auburn, Alabama.
WALKER, B. L.....	Union Springs, Alabama.
WATKINS, J. L.....	Huntsville, Alabama.
WEBB, CHARLES S.....	Lee county, Alabama.
WILLIAMS, GAZ. DAVIS.....	Barbour county, Alabama.
WILLIAMS, T. S.....	Society Hill, South Carolina.

FOURTH CLASS.

ALLEN, JAMES UPSHAW.....	Athens, Alabama.
BIBB, HARRISON.....	Montgomery county, Alabama.
BLAKE, YOUNG.....	Cleburne county, Alabama.
BLOCK, S. D.....	Wilcox county, “
BROWN, H. L.....	Perry county, Alabama.
BURNETT, P. H.....	“ “ “
BYRD, J. W.....	Lee county, Alabama.
CAMPBELL, MOSES G.....	Tuskegee, Alabama.
CARLISLE, J. A.....	Chambers county, Alabama.
CLARK, H. D.....	Barbour county, Alabama.
CLOPTON, DAVID.....	Montgomery, Alabama.
CRITTENDEN, O. H.....	Macon county, Alabama.
CUNNINGHAM, J. D.....	Clarke county, “
CUNNINGHAM, W. H.....	“ “ “
DOWDELL, ANDREW LIPSCOMB.....	Auburn, “
DUDLEY, F. J.....	Columbus, Georgia.
DUDLEY, N. L.....	“ “ “
DUNN, S. C.....	Lee county, Alabama.
ECKFORD, W. R.....	Verona, Mississippi.
ESTES, M. S.....	Columbus, Georgia.
FEAGIN, R. I.....	Lumpkin, “
FITZPATRICK, JAMES MADISON.....	Talladega county, Alabama.
GARLAND, EDWARD H.....	Barbour county, “
GLENN, WALTER ROSS.....	Lee county, Alabama.
HAMMOCK, J. A.....	“ “ “
HARDY, E. J.....	Lowndes county, Alabama.
HARVEY, WM. AUGUSTUS.....	Auburn, Alabama.
JETER, JOE H.....	Opelika, Alabama.
JOHNSTON, EGBERT B.....	Eufaula, Alabama.
KYLE, J. A.....	Jackson county, Alabama.
LAMAR, WM. H.....	Lee county, Alabama.
LANGHORNE, J. M. jr.....	Perry county, Alabama.
LEE, H. L.....	Union Springs, Alabama.
LETCHER, J. T.....	Coosa county, Alabama.
LOVERN, G. W.....	Randolph county, Alabama.
MAXWELL, R. M.....	Coosa county, “
MCCAIN, W. L.....	Montgomery county, Alabama,
MCGOUGH, THOMAS DAWSON.....	Russell county, Alabama.

McINTOSH, A. M.	Tallapoosa county, Alabama.
McLEOD, W. C.	Columbus, Georgia.
McRAE, A.	Henry county, Alabama.
MITCHERL, ALEX. JORDAN	Russell county, “
MULLIN, J. H.	Opelika, Alabama.
MURRELL, GEORGE O.	Mobile, “
PARKER, J. L.	Sumter county, Alabama.
PEARSON, A. A.	Dadeville, Alabama.
QUINLAN, FRANK P.	Mobile, “
ROSS, BENNETT BATTLE	Auburn, Alabama.
ROSS, ISAAC S.	Lee county, Alabama.
SEROYER, A. B.	Chambers county, Alabama.
SIMMS, M. L.	Lawrence “ “
SIMMONS, W. H.	Dale county, Alabama.
SMITH, JOHN V.	Tallapoosa county, Alabama.
SMITH, W. R. D.	Randolph “ “
SPURLIN, W. D.	Wilcox “ “
SYLVESTER, T. R.	Barbour “ “
TAYLOR, W. DANA	Montgomery county, Alabama.
THORNTON, YANCEY	Chilton county, Alabama.
TRAMMELL, J. D., No. 1.	Macon “ “
TRAMMELL, J. D., No. 2.	Chambers county, Alabama.
WAGNON, J. E.	Lee county, Alabama.
WALKER, FRANK JOHN	Galveston, Texas.
WELCH, THOS. NEWTON	Talladega county, Alabama.
WHITE, C. A.	West Point, Georgia.
WITT, JOHN CALHOUN	Escambia county, Alabama.
WOODRUFF, J. W.	Limestone “ “

FIFTH CLASS.

AIKEN, J. G.	Mobile, Alabama.
ALLRED, F. H.	Troy, “
ALLRED, O. B.	“ “
ANDREWS, W. T.	Auburn, “
ASHFORD, F. E.	Limestone county, Alabama.
BALDWIN, B. J., jr., No. 1.	Union Springs, Alabama.
BALDWIN, B. J., jr., No. 2.	“ “ “
BINFORD, J. L.	Lee county, “
BOON, W. L.	Tallapoosa county, Alabama.
BRANTLEY, J. A.	Troy, Alabama.
BREWER, S. O.	Opelika, Alabama &
BUCK, JOHN E.	Mobile county, Alabama.
CATTS, S. J.	Dallas county, “
CARPENTER, W. D.	Montgomery, Alabama.
CHERRY, L. D.	Opelika, Alabama.
CLAYTON, THOS. N.	Barbour county, Alabama.
COLEMAN, WINDHAM	Pickens county, “
COOPER, J. H.	Lee county, “

COX, B. L.....	Lee county, Alabama.
CRAIG, R. A.....	Marion, Alabama.
CRAWFORD, J. W.....	Auburn, " "
DICK, JAMES K.....	" "
DILLARD, A. L.....	" "
DILLARD, J. A.....	Montgomery, Alabama.
EASLEY, A. B.....	Opelika, Alabama.
ELLIS, J. B.....	Dallas county, Alabama.
ELLIS, R. H.....	Montgomery county, Alabama.
ENGLAND, R. D.....	Marion, Alabama.
FARRAR, WM.....	Auburn, " "
FITZPATRICK, BENJ. H.....	Union Springs, Alabama.
FLINN, OCTO.....	Montgomery, " "
GAMBLE, J. G.....	Limestone county, Alabama.
GILMER, F. J.....	Bullock county, " "
GREER, JAMES.....	Florence, Georgia.
HALEY, W. J.....	Opelika, Alabama.
HAMMACK, T. H.....	Lee county, " "
HARDAWAY, BENJ. H.....	Auburn, " "
HARDIN, A. E.....	Opelika, " "
HARDIN, TABOR.....	Auburn, " "
HARWELL, G. R.....	Opelika, " "
HEAD, ORREN C.....	Lee county, " "
HIGGINS, A. P.....	Troy, " "
HIGHTOWER, GEO. H.....	Lee county, " "
HOLLAND, H. H.....	Mobile " "
HOLT, C. N.....	Montgomery, Alabama.
HOLT, N. B.....	" "
HUDSON, W. A.....	Opelika, " "
JONES, T. H.....	Montgomery, " "
JUDKINS, R. W.....	Montgomery county, Alabama.
KELLY, GEO. P.....	Huntsville, Alabama.
LEE, ARTHUR.....	Perry county, " "
LONG, P. H.....	Lee " "
McLEMORE, S. R.....	Montgomery, " "
MILLER, S.....	Lumpkin, Ga.
MITCHELL, H. S.....	Russell county, Alabama.
MITCHELL, S. C.....	Opelika, Alabama.
MOORE, J. G.....	Lee county, " "
MOORE, W. O.....	" " "
NEAL, FLETCHER A.....	" " "
NELMS, E. J.....	" " "
OLIVER, S. H.....	Mobile, " "
O'NEAL, J. N.....	Shelby county, Alabama.
PACE, J. W.....	Lee " "
PEARSON, H. L.....	Tallapoosa " "
PEARSON, L. W.....	" " "
PEARSON, S. B.....	" " "

PERRY, P. B.....	Tallapoosa county, Alabama.
POOLE, E. D.....	Lowndes " "
PUGH, JAMES L., Jr.....	Eufaula, "
PURNELL, J. H.....	Pickens " "
READ, JAMES MARSHALL.....	Lee " "
REID, JAMES MADISON.....	Auburn, "
ROSS, W. J.....	Eufaula, "
SAMFORD, NORRIS P. D.....	Auburn, "
SHERROD, HENRY C.....	Lawrence county, "
SINCLAIR, W. S.....	Dallas " "
SLAUGHTER, G. W.....	Chambers " "
SLAUGHTER, W. F.....	" " "
SMITH, ISAAC.....	Opelika, "
STEWART, WALTER V.....	Pickens " "
STROM, J. E.....	Montgomery county, Alabama.
TALBOT, W. S.....	Lee county, Alabama.
THOMPSON, JEFFERSON D.....	Huntsville, "
THORNTON, W. W.....	Montgomery, "
TRAMMELL, R. H.....	Chambers county, Alabama.
TRAMMELL, THOS.....	Macon " "
TURNER, ALLEN G.....	Tallapoosa " "
URQUHART, R. H.....	Auburn, Alabama.
VANHOOSE, M. A.....	" " "
VANHOOSE, E. I.....	" " "
VANHOOSE, W. C.....	" " "
WILKERSON, I. W.....	Tallapoosa county, Alabama.
WILKERSON, J. J.....	" " "
WILSON, A. B.....	Chambers " "
WRIGHT, W. T.....	Lee " "

RECAPITULATION.

Graduates 1877.....	4
First Class.....	8
Second Class.....	16
Third Class.....	53
Fourth Class.....	66
Fifth Class.....	95—238

COURSES OF INSTRUCTION.

The DEGREE COURSES of the College are now organized as follows:

I.

COURSE IN AGRICULTURE.

II.

COURSE IN LITERATURE.

III.

COURSE IN SCIENCE.

IV.

COURSE IN ENGINEERING.

The four regular Degree Courses extend through four years. Except in languages, they are identical for two years. For the two remaining years, the studies in each course are arranged with reference to the end in view. Certificates of Proficiency are given in special courses of Surveying, Architecture and Commerce.

Preparatory Department.

FIFTH CLASS.

In view of the imperfect preparation of many applicants for admission into the College, and of the want of educational facilities in many localities for suitable preparation for college, or even for obtaining a good academic education, there has been established, in connection with the Agricultural and Mechanical College, a PREPARATORY DEPARTMENT.

This Department is intended to be auxiliary to the higher departments of the College, and especially to prepare students to enter the fourth class of any course of the College. It is

in charge of competent instructors and under the general supervision of the Faculty. It affords unusual facilities for thorough preparation for the College courses, or for a good academic education.

ORGANIZATION.

This school is divided into two classes, styled first and second sections. Applicants for admission must be at least twelve years old and should submit to the President satisfactory testimonials of good moral character. Candidates for admission to the second section, will be examined as follows:

In Reading, Spelling, Elementary Geography, Arithmetic through long division, Elementary English Grammar.

Candidates for section one, will be examined in the studies of the lower section.

EXPENSES.

The expenses of students in this Department are the same as those of the College classes proper, and the various remarks under the head of SPECIAL INFORMATION of the present Catalogue are applicable alike to the College and the Preparatory Department. Students five feet high and fourteen years of age, are assigned to the Corps of Cadets and must wear the College uniform. Students under that age are not required to wear the uniform, and if rooming at home and *not* in the Corps of Cadets, do not pay the surgeon's fee.

COURSES OF STUDY.

SECOND SECTION—*First Year.*

Orthography, Reading, Penmanship, Arithmetic.
Geography and Map Drawing.
English Grammar and Composition, Latin.

FIRST SECTION—*Second Year.*

Orthography, Reading, Elocution, Penmanship.
Free Hand Drawing, Arithmetic Completed.
Algebra, elementary, completed.
* English Grammar and History.
Latin, Greek.

* Omitted if Latin and Greek are studied.

TERMS OF ADMISSION.

Candidates for admission to the Fourth Class of the College course, must be fifteen years of age and pass a creditable examination in the subjects of the preparatory course, and a proportionate increase of age and advancement in studies will be required for entrance into higher classes.

Entrance examinations will be held on Monday and Tuesday preceding the opening of each term in September and February, at which all applicants should be present.

No one will be admitted who has been expelled or dismissed from any other college.

Satisfactory testimonials of good moral character are in all cases required.

Students, on their arrival, will report immediately to the President, and present their testimonials and instructions. Thence they will be referred to the Treasurer, the fees will be paid and students will present themselves to the examining committee, by whom, after successful examination, they will be assigned to the selected course and proper class. Having been examined and assigned, the students will report to the Commandant, presenting the examination ticket and Treasurer's receipt, by whom the applicants will be matriculated, furnished with a copy of the Regulations, and assigned to his proper section and company.

Students will, as early as practicable, secure suitable boarding, and any unnecessary delay in securing board, reporting to President, Treasurer, Examining Committee and Commandant, will be regarded as satisfactory evidence of unfitness for admission.

ORDER OF COURSES.

The College offers the following courses as allowing large freedom of choice, and at the same time indicating a specific degree to be attained in each. These courses are substantially those of the best schools which propose to impart both scientific and literary education, and each degree course requires four years for its accomplishment. It will be seen on examination that the prominence given to the Natural

Sciences and the practical element associated with all departments of study, can not fail to render the courses especially valuable. Under Agricultural Chemistry will be considered composition of soils, relations of air and moisture to vegetable growth, chemistry of farm processes, methods of improving soils, and various other topics which may be properly treated of under this department. Botany, chemical physics and other departments of science will be studied and taught with special reference to their relation to Agriculture and Horticulture.

There are three experimental farms connected with the College—one at Auburn, another in the Valley of the Tennessee, near Courtland, and the third at Boiling Springs, in Wilcox county. Others will be established in different parts of the State, as the wants of the agricultural community may demand and the means of the College may justify. On these farms experiments in grasses, grains, textile and forage plants, vegetables, modes of culture, fertilizers, &c., are now in progress. These experiments will be continued from year to year, with such changes as may be deemed desirable, either for the instruction of the students or for the promotion of agricultural science.

I. THE COURSE IN AGRICULTURE, leading to the degree of Bachelor of Agriculture.

This course embraces either Classics, or French and German; Natural Science as related to agriculture, particularly structural and systematical Botany; Agricultural and Analytical Chemistry; Natural History, particularly Zoology and Entomology—in the latter branch, insects injurious and beneficial to vegetation will be carefully studied; Mathematics, with surveying and leveling; Political Economy, with lectures upon titles, contracts and accounts; Practical Agriculture, covering soils, drainage, irrigation, fertilization and preparation of crops—use of implements—farm animals—fruit culture—market gardening—floriculture and landscape gardening. This course aims to give a student a thorough knowledge of the science and practice of farming.

II. COURSE IN LITERATURE—degree Bachelor of Arts.

This course embraces Latin, Greek, a thorough study of English in its linguistic elements and in its literature; philosophic and historical studies; mathematics and natural science, but not to the same extent as required in the courses of Science or Engineering. This course is approximately the same as the usual course in Arts, but is extended in the department of science and in the study of the English language.

III. COURSE IN SCIENCE, leading to the degree of B. S.

This course is designed for those who wish to study the Natural Sciences, Mathematics, Modern Languages, Latin, Literature, History, Rhetoric, Logic, and Mental and Moral Philosophy, as thoroughly as they are studied in the best colleges, and who would be glad to enjoy the cultivation and association of college life. The course in Mathematics and Natural Science is extended. A full course of Chemistry and Mathematics is included, and those desiring to follow any business in life requiring thorough knowledge of Mechanics or Chemistry, and who do not propose a connection with Engineering, would properly select the general Scientific Course. Those who have taken the usual classical course, by taking the course in Science would be qualified as teachers for any department of education furnished by the normal school.

IV. COURSE IN CIVIL ENGINEERING—degree Bachelor of Engineering.

This course extends the scientific course in applied mathematics, embraces full instruction in regard to the construction of common roads, pikes, railroads, bridges, canals, improvements of rivers, harbors, &c.

V. COURSE IN SURVEYING.—Instruction in Surveying is of the most practical character, embracing every variety of field work with actual use of instruments.

A certificate of *Proficiency in Surveying* will be granted all applicants who stand an *approved* examination in the studies of the Third and Fourth Class in any course.

VI. COURSE IN BUILDING AND ARCHITECTURE.—Students

desiring a partial course in Engineering may omit a part of the higher Mathematics, Chemistry, and study of languages. The course would consist of Architectural Drawing, equilibrium and stability of structures, arches, trusses, roofs, building material, mortars, &c.

Upon completion of the course, a certificate of proficiency will be given.

VII. COURSE IN COMMERCE.—The commercial course is intended to last two years, combining the work of the first section of the preparatory department with the regular work of the Fourth College Class, substituting commercial arithmetic, book-keeping, and training in business forms and correspondence for an equivalent amount of work in ancient or modern languages. It is based on a thorough training in English grammar and plain mathematics. If fully prepared to enter the Fourth Class this course can be completed by the student in one year. Upon completion of the course a certificate of proficiency will be given.

COURSE OF STUDY.

COMMERCIAL COURSE.

FIRST YEAR.

Orthography, Elocution, Penmanship, Drawing, Robinson's Practical Arithmetic, Elementary Algebra, completed, English Grammar.

History of United States and England.

SECOND YEAR.

Composition.

Outlines of Ancient History.

Algebra.

Plane Geometry and Trigonometry.

Physics; Botany.

Commercial Arithmetic.

Book-keeping.

Business Forms and Commercial Correspondence.

Course in Agriculture.

FOR FOUR YEARS.

FOURTH CLASS—FIRST YEAR.

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| †ENGLISH | <i>First and Second Terms—Composition; History.</i> |
| *MATHEMATICS | <i>First Term—Algebra.</i> |
| | <i>Second Term—Plane Geometry; Plane Trigonometry.</i> |
| §LANGUAGES | <i>First and Second Terms—French or Latin of Fourth Class.</i> |
| †NATURAL SCIENCE | <i>First and Second Terms—Physics; Elementary Botany.</i> |
| †AGRICULTURE | <i>First and Second Terms—Elements of Practical Agriculture.</i> |
| †DRAWING | <i>First Term—Linear Drawing.</i> |
| | <i>Second Term—Free Hand Drawing.</i> |
| *MILITARY | <i>First and Second Terms—Drill.</i> |

THIRD CLASS—SECOND YEAR.

- †ENGLISH *First Term*—Rhetoric; Composition and Declamation.
Second Term—Milton and English Classics; Composition
and Declamation.
- †MATHEMATICS. *First Term*—Solid Geometry; Mensuration.
Second Term—Analytical Geometry.
- §LANGUAGES *First and Second Terms*—German or Latin of Third
Class.
- †NATURAL SCIENCE. . . *First and Second Terms*—Inorganic and Organic Chemis-
try.
- †GEODESY. *First Term*—Compass and Chain Surveying and Plane
Table Surveying, Theory and Practice; use of Field
Instruments.
Second Term—Trigonometrical and Topographical Sur-
veying and Leveling, Theory and Practice.
- †DRAWING *First and Second Terms*—Topographical Drawing; Ma-
chine Drawing.
- MILITARY *First and Second Terms*—Tactics and *Drill.

‡Two Recitations per week.

8 Four Recitations per week

†Three Recitations per week.

*Five Recitations per week

SECOND CLASS.

- †ENGLISH *First Term*—English and American Literature.
Second Term—Logic.
- †MATHEMATICS..... *First Term*—Analytical Geometry.
- †NATURAL SCIENCE... *First and Second Terms*—Physics; Mechanics.
- †AGRICULTURE..... *First Term*—Soils; Drainage; Irrigation; Fertilization
 and Preparation of Crops.
Second Term—Farm Crops; Implements and Animals.
- *CHEMISTRY..... *First and Second Terms*—Qualitative and Quantitative
 Analysis.
- MILITARY *First and Second Terms*—†Tactics; *Drill.

FIRST CLASS.

- †NATURAL SCIENCE... *First and Second Terms*—Descriptive Astronomy; Geology; Physical Geography; Meteorology.
- *NATURAL HISTORY... *First Term*—Zoology.
Second Term—Systematic and Structural Botany; Entomology; Insects injurious and beneficial to Vegetation.
- *AGRICULTURE..... *First Term*—Fruit Culture; Market Gardening.
Second Term—Floriculture; Landscape Gardening.
- †AGRIC'L CHEMISTRY... *First Term*—How Crops Grow.
Second Term—How Crops Feed.
- †PHILOSOPHY *Second Term*—Political Economy; Titles, Contracts, and Accounts (Lectures).
- MILITARY *First and Second Terms*—†Tactics; *Drill; Artillery and Infantry.

Course in Literature.

FOR FOUR YEARS.

FOURTH CLASS.

- †ENGLISH *First and Second Terms*—Composition; History.
- *MATHEMATICS *First and Second Terms*—Algebra; Plane Geometry; Trigonometry.
- §LATIN..... *First Term*.—Cicero's Orations; Grammar and Exercises; Ancient Geography.

Second Term.—Virgil's *Æneid*; Prosody; Exercises; Mythology.

*GREEK.....*First and Second Terms.*—Goodwin's Greek Reader; Xenophon and Herodotus; Grammar and Exercises.

†NATURAL SCIENCE....*First and Second Terms.*—Physics; Botany.

*MILITARY.....*First and Second Terms.*—Drill.

THIRD CLASS.

‡ENGLISH.....*First Term.*—Rhetoric; Original Composition and Declamation.

Second Term.—Milton and English Classics; Composition and Declamation.

†MATHEMATICS.....*First Term.*—Solid Geometry; Mensuration.

Second Term.—Analytical Geometry.

§LATIN.....*First Term.*—Tacitus, Germania and Agricola; Prose Composition.

Second Term.—Horace; Prose Composition.

†GREEK.....*First Term.*—Goodwin's Greek Reader, Plato and Thucydides; Prose Composition (Jones).

Second Term.—Homer (Boise); Prose Composition (Jones).

†NATURAL SCIENCE....*First and Second Terms.*—Chemistry, Inorganic and Organic.

†GEODESY.....*First Term.*—Compass and Chain Surveying and Plane Table Surveying, Theory and Practice; Use of Field Instruments.

Second Term.—Trigonometry and Topographical Surveying and Leveling; Theory and Practice.

MILITARY.....*First and Second Terms.*—Tactics; *Drill.

SECOND CLASS.

†ENGLISH.....*First and Second Terms.*—English and American Literature, Logic.

†MATHEMATICS.....*First Term.*—Analytical Geometry.

§LATIN.....*First Term.*—Horace, Prose Composition.

Second Term.—Cicero and Terence, Prose Composition.

†GREEK.....*First Term.*—Demosthenes' Popular Orations; Composition (Boise).

Second Term.—Tragedy; Composition (Boise).

†NATURAL SCIENCE. .*First and Second Terms.*—Physics; Mechanics.

MILITARY.....*First and Second Terms.*—†Tactics; *Drill.

FIRST CLASS.

†ENGLISH.....*First and Second Terms.*—Criticism; English Classics and Oratory.

- †LATIN.....*First and Second Terms.*—Juvenal; Plautus, Latin Literature.
- †GREEK.....*First and Second Terms.*—Tragedy; Comedy; Greek Literature.
- †NATURAL SCIENCE...*First and Second Terms.*—Descriptive Astronomy; Geology and Physical Geography.
- †PHILOSOPHY.....*First Term.*—Mental Philosophy; Evidences of Christianity.
Second Term.—Political Economy; Moral Philosophy.
- MILITARY.....*First and Second Terms.*—†Tactics and *Drill, Artillery and Infantry.
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Course in Science.

FOR FOUR YEARS.

FOURTH CLASS.

- †ENGLISH.....*First and Second Terms.*—Composition; History.
- *MATHEMATICS.....*First and Second Terms.*—Algebra; Plane Geometry; Plane Trigonometry.
- §LANGUAGES.....*First and Second Terms.*—French or Latin of Fourth Class.
- †NATURAL SCIENCE...*First and Second Terms.*—Physics; Elementary Botany.
- †DRAWING.....*First Term.*—Linear Drawing.
Second Term.—Free Hand Drawing.
- *MILITARY.....*First and Second Terms.*—Drill.

THIRD CLASS.

- †ENGLISH.....*First Term.*—Rhetoric; Original Composition and Declamation.
Second Term.—Milton and English Classics; Composition and Declamation.
- †MATHEMATICS.....*First Term.*—Solid Geometry; Mensuration.
Second Term.—Analytical Geometry.
- §LANGUAGES.....*First and Second Terms.*—German or Latin of Third Class.
- †NATURAL SCIENCE...*First and Second Terms.*—Chemistry, Inorganic and Organic.

- †GEODESY.....*First Term.*—Compass and Chain Surveying and Plane Table Surveying, Theory and Practice; Use of Field Instruments.
Second Term.—Trigonometrical and Topographical Surveying and Leveling, Theory and Practice.
- †DRAWING.....*First and Second Terms.*—Topographical Drawing; Machine Drawing.
- MILITARY.....*First and Second Terms.*—Tactics and *Drill.

SECOND CLASS.

- †ENGLISH.....*First and Second Terms.*—English and American Literature; Logic.
- *MATHEMATICS.....*First and Second Terms.*—Analytical Geometry; Calculus.
- †NATURAL SCIENCE...*First and Second Terms.*—Physics; Mechanics.
- *CHEMISTRY.....*First and Second Terms.*—Qualitative and Quantitative Analysis.
- MILITARY.....*First and Second Terms.*—†Tactics and *Drill.

FIRST CLASS.

- †ENGLISH.....*First Term.*—Criticism.
Second Term.—English Classics and Oratory.
- *NATURAL SCIENCE...*First and Second Terms.*—Descriptive Astronomy; Mineralogy; Geology; Physical Geography; Meteorology.
- §LABORATORY.....*First and Second Terms.*—Work in Laboratory.
- †PHILOSOPHY.....*First Term.*—Mental Philosophy; Evidences of Christianity.
Second Term.—Political Economy; Moral Philosophy.
- MILITARY.....*First and Second Terms.*—†Tactics and *Drill; Artillery and Infantry.

Course in Engineering.

FOR FOUR YEARS.

FOURTH CLASS.

- †ENGLISH.....*First and Second Terms.*—Composition; History.
- *MATHEMATICS.....*First Term.*—Algebra.
Second Term.—Plane Geometry; Plane Trigonometry.

†Two Recitations per week.
 §Four Recitations per week.

†Three Recitations per week.
 *Five Recitations per week.

- §LANGUAGES.....*First and Second Terms.*—French or Latin of Fourth Class.
- †NATURAL SCIENCE...*First and Second Terms.*—Physics; Elementary Botany.
- ‡DRAWING.....*First Term.*—Linear Drawing.
Second Term.—Free Hand Drawing.
- *MILITARY.....*First and Second Terms.*—Drill.

THIRD CLASS.

- ‡ENGLISH.....*First Term.*—Rhetoric; Composition and Declamation.
Second Term.—Milton and English Classics; Composition; Declamation.
- †MATHEMATICS.....*First Term.*—Solid Geometry; Mensuration.
Second Term.—Analytical Geometry.
- §LANGUAGES.....*First and Second Terms.*—German or Latin of Third Class.
- †NATURAL SCIENCE...*First and Second Terms.*—Chemistry, Inorganic and Organic.
- ‡GEODESY.....*First Term.*—Compass and Chain Surveying and Plane Table Surveying, Theory and Practice; Use of Field Instruments.
Second Term.—Trigonometrical and Topographical Surveying and Leveling, Theory and Practice.
- ‡DRAWING.....*First Term.*—Topographical Drawing.
Second Term.—Machine Drawing.
- MILITARY.....*First and Second Terms.*—Tactics; *Drill.

SECOND CLASS.

- ‡ENGLISH.....*First Term.*—English and American Literature.
- †MATHEMATICS.....*First and Second Terms.*—Analytical Geometry and Calculus.
- †NATURAL SCIENCE...*First and Second Terms.*—Physics; Mechanics.
- ‡GEODESY.....*First Term.*—Hydrographical, Topographical and Town Surveying, Theory and Practice.
Second Term.—Line Surveying; Common Roads; Railroads; Canals; Tunnels; Staking out for Construction.
- *DRAWING.....*First Term.*—Bridge Drawing.
Second Term.—Sketches of Tools; of the Component Parts of Machines; and of Bridge and other Structures.
- MILITARY.....*First and Second Terms.*—†Tactics; *Drill.

FIRST CLASS.

- †MATHEMATICS.....*First Term.*—Spherical Trigonometry and Practical Astronomy.

- †NATURAL SCIENCE... *First and Second Terms*.—Descriptive Astronomy; Geology; Physical Geography; Meteorology.
- *CIVIL ENGINEERING... *First and Second Terms*.—Building Materials; Mortars and Cements; Masonry; Wood and Metals; Strength of Materials; Arches; Framing; Bridges and Road Making; Mining
- *TOPOGRAPHICAL. . . } *First and Second Terms*.—Plans, Profiles and Sections of
DRAWING. . . } Railroad Surveys.
- MILITARY. *First and Second Terms*.—†Tactics and *Drill; Artillery and Infantry.

TEXT BOOKS.

PREPARATORY DEPARTMENT.

Goodrich's Sixth Reader, Payson, Dunton and Scribner's Penmanship, Swinton's Word Book, Swinton's Word Analysis, Cornell's Intermediate Geography, Holmes' History of the United States, Anderson's History of England, Hart's English Grammar, Robinson's Practical Arithmetic, Robinson's Elementary Algebra. *Latin*: Allen and Greenough's Latin Grammar and (new) Method, Caesar, Sallust (Chase and Stuart). *Greek*: Goodwin's Greek Grammar, and White's or Boise's Lessons, Goodwin's Anabasis (first book).

FOURTH CLASS.

Robinson's Complete Algebra, Davies' Legendre (new edition), Davies' Trigonometry, Bloss' Ancient History. *French*: Fasquelle's French Course, Fasquelle's Colloquial Reader, Chrestomathie Francaise, Surrenne's Dictionary, Davidson's Linear Drawing, White's Art Studies, Stewart's Elementary Physics, Gray's School and Field Botany, Bryant and Stratton's Book-keeping, Bryant and Stratton's Commercial Arithmetic, Upton's Infantry Tactics, Allen & Greenough's or Chase & Stuart's Latin Texts.

THIRD CLASS.

Geometry, Davies' Legendre, Loomis' Analytical Geometry (new edition), Davidson's Projections and Model Drawing, Davies' Surveying and Mensuration, Bloxam's Chemistry, with Lectures, Worman's German Grammar, Worman's German Echo, Schiller's Wilhelm Tell, Adler's German Dictionary, Hart's Composition and Rhetoric, Selections from English Authors, United States Army Regulations.

SECOND CLASS.

Loomis' Analytical Geometry (new edition), Loomis' Differential Calculus (new edition), Olmsted's College Philosophy (Snell's), Church's Laboratory

Guide, Caldwell's Agricultural Analysis, American Farm Book, Smith's Linear Perspective, Henck's Field Book, Hudson's Shakespeare, Shaw's History of English Literature, Logic, Coppee, Welcker's Military Lessons.

FIRST CLASS.

Loomis' Integral Calculus, Mahan's Engineering, Mahan's Industrial Drawing, Lockyer's Astronomy, E. S. Dana's Mineralogy, Dana's Geology, Maury's Physical Geography, Hickok's Science of Mind, Walker's Political Economy, Peabody's Moral Philosophy, Henderson's Gardening for Profit, How Crops Grow, How Crops Feed, Gray's Structural and Systematic Botany, Tenney's Elements of Zoology, Wohler's Mineral Analysis, Barry's Fruit Garden, Henderson's Floriculture, Kemp's Landscape Gardening, United States Artillery Tactics.

REFERENCE BOOKS.

Brush's Determinative Mineralogy, Fresenius' Qualitative and Quantitative Analysis, Plattner's Blow Pipe Analysis, Smith's and Enthoffer's Topography, Rankine's Engineering and Applied Mechanics, Stoney on Strains, Wood's Roofs and Bridges, Merrill on Bridges, Warren's Machine Drawing, Dempsey on Drainage, French on Farm Draining, Schmitz's Students' Classical Atlas, Church's Descriptive Geometry and Shades and Shadows, Peck's Mechanics, Wiesbbach's Mechanics, Mahan's Stone Cutting, Dubois' Graphical Statics, Simms on Leveling, Ernst's Military Engineering.

Degrees and Post Graduate Courses.

The degrees of Bachelor of Arts, Bachelor of Agriculture, Bachelor of Science, and Bachelor of Engineering, will be granted only to those who have passed satisfactory examinations in their respective courses. Cadets who remain one year after graduation, and complete the prescribed course in Agriculture, Literature, or Science, shall, on examination, be entitled to the degree of Master. And the completion of the post graduate course of one year, will entitle the graduate of Engineering to the degree of Civil Engineer.

Certificates of proficiency will be granted Cadets upon completion of the courses of Surveying, Architecture, and Commerce.

All degrees of regular courses must be conferred upon recommendation of the Faculty, approved by the Board of Trustees.

Bad character, or college delinquency of any kind, shall be good reason for exclusion from a degree.

Each graduate shall propose and submit to the Faculty a thesis on some subject of immediate relation to the studies of his course.

Applicants for degrees and certificates shall notify the Faculty at least one term before Commencement.

No Cadet of the College will be admitted to any degree unless he shall have exhibited to the President of the College a certificate from the Treasurer that his College dues are all paid, and shall have performed the exercise assigned by the Faculty for Commencement.

SPECIAL INFORMATION.

DEPARTMENT OF MILITARY, SCIENCE AND TACTICS.

By the act of Congress for the endowment of Agricultural and Mechanical Colleges, in prescribing the required studies, the words, "*including military tactics,*" are used. The act is designed to be faithfully carried out, by imparting to each student, not physically incapacitated to bear arms, practical instruction in the school of the soldier, of the company, and the battalion. The duties of guards, outpost and picket service, are practically taught. The College is provided, by the State, with breach-loading cadet rifles, swords and accoutrements.

The following uniform has been prescribed for dress, viz: Frock of Cadet gray, three rows of College buttons; gray pants and black hat, trimmings black. A very neat and serviceable dress suit can be obtained here, not to exceed \$25, and a fatigue suit, not to exceed \$18—sufficient, with proper care, for one year's service. This is less expensive than the usual clothing. All students are required to wear this uniform at all times during the term. In attendance upon drills and guard, students lose no time from academic studies.

The drills are short, and the military duty involves no hardship. The military drill is health-giving exercise, and its good effects in the development of the *physique* and improvement of the carriage of the Cadet, is manifest.

The entire body of students is divided into companies. The officers are selected for proficiency in drill and deportment. Each company is officered by one Captain, one First Lieutenant, one Second Lieutenant, with a proper number of Sergeants and Corporals. The officers and non-commissioned officers are distinguished by appropriate insignia of

rank. These appointments are conferred by the Commandant of Cadets, as honorary distinctions, and are continuous for the collegiate year, unless forfeited by misconduct.

Cadet-officers are regarded as *assistants in the enforcement of discipline*; their orders are to be considered as duly authorized and to be obeyed accordingly. They are expected to set samples of military deportment and general good conduct to other cadets. Cadet-officers, squad-marchers and sentries are required, under pain of being themselves reported delinquent, to report all facts of delinquency falling under their notice in the performance of their duties. It is made the special duty of every non-commissioned officer to report lateness, disorder in ranks, and all infractions of rules falling under his notice while on duty with his company, guard, or other detachment.

No cadet, or other person, shall be questioned in any way on account of reports rendered by him, nor shall he hold any conversation relating to it with the cadet reported.

Appointments and promotions in Corps are honorable distinctions for military proficiency and good conduct.

Promotions will take place in the order of original appointment only when efficiency, fidelity, progress in studies, conduct and other qualifications warrant them.

Every officer, commissioned and non-commissioned, upon appointment or promotion, is required to pledge himself to a faithful discharge of his official duties.

Every cadet to whom arms and accoutrements are issued, will be held strictly accountable, not only for their preservation, but for their perfect good order at all times.

The prescribed dress will be strictly adhered to, nor will the slightest deviation be allowed. The wearing of fancy cravats, fancy caps, etc., will not be tolerated upon any pretense whatever. Hair will be worn short, and whiskers and moustaches not allowed.

FREE TUITION.

The Trustees have authorized the Faculty to admit all cadets free of tuition. This is not limited to residents of the

State. No charge is made for instruction. An incidental fee of five dollars per term is made for servant's attendance in building, fuel, ordinary repairs, use of instruments and chemicals.

A fee of two and a half dollars per term is paid to the Surgeon by each cadet for medical services. No other College fees are required.

SESSION RECORDS AND CIRCULARS.

Daily records of the various exercises of the classes are kept by the officers of instruction in a form adapted to permanent preservation. These are returnable weekly and monthly through the office of the Commandant to the President, and give full information with regard to each student's position, both as respects observed characteristics of general conduct, and the knowledge displayed by him of the current subjects of study. From this record a circular or statement is sent to the parent or guardian every two months.

EXAMINATIONS.

There shall be a written or oral examination of the studies passed over, at the end of each term.

At the annual examination, a *general merit roll*, or classification, according to their standing in studies or conduct, will be arranged, by taking the average of all the numbers expressing the monthly merit in the several studies of the year, and in conduct, together with the merit marked by Professors and Board of Trustees, on the scale of 0 to 100, at the examination.

A general yearly average of 75 (the maximum mark being 100) in scholarship will be required to pass a student from any class to the next higher, and if a mark less than 65 is attained in any study, he shall, in addition be required to pass another examination in that study at the beginning of the ensuing session, before being allowed to pass up.

If any student shall fall below 75 in his average of merit marks in a study, he shall be declared *deficient* in progress.

A cadet found *deficient* in progress will not be advanced to

the next class; and if found so on account of neglect of studies, he may be dismissed.

For a student's graduating standing, that of the last year will be averaged with those of the previous years in his Collegiate course.

It is particularly required that every student who enters the College shall remain through the examination at the end of the term. Leave of absence and honorable discharges will, therefore, not be granted within six weeks of the examination, except in extreme cases.

Examinations for Degrees or Certificates of Proficiency are held at such time as may be selected by the Faculty, usually during the last *four weeks* of the last term, and embrace in their scope the entire subjects of study in their course.

DECLAMATION, COMPOSITION: ORIGINAL SPEECHES.

Students of Fourth and Third Classes are required to write one composition each month, and frequently to practice declamation in the College Chapel.

The First and Second Classes in Literature deliver three original orations during the year.

FIELD WORK AND EXCURSIONS.

In aid of the practical studies of the College and as a means of familiarizing students with the actual details of work, the second class in Engineering will devote two weeks in December, and the first class, four weeks in April, to field work, and to visits of inspection to machine shops, mills, mines, furnaces, and engineering constructions within convenient reach. Geological students will be afforded in vacation each year an opportunity of accompanying the State Geologist in his excursions. In the past scholastic year the second class in Engineering has visited and inspected the cotton and woolen mills, foundries, machine shops, bridges and gas works in and near Columbus, Georgia. The first class in Engineering inspected the foundries, work shops, gas and water works of Montgomery, and the iron region lying along the South & North Railroad.

ROAD ENGINEERING.

The Senior Class of the Engineering Course is organized as an Engineering Corps, and goes through all the necessary operations for the construction of a railroad from Auburn to some selected terminus.

Preliminary study of maps.

Reconnoissance.

Running Preliminary lines.

Maps and Memoirs of same.

Final location of road ; Grades and Curves.

Final Maps, showing Longitudinal and Cross Sections, Excavations, &c.

The Field Work and Office Work, including Drafting and Calculation, are performed under the direction of the Professor. Each step is accompanied by text book study and lectures. Examinations are made of Engineering works in the vicinity, and written reports upon them (with drafts) are required. Both theory and practice are thoroughly taught.

The work in this Course begins this year with the first Collegiate term.

DRAWING.

Drawing, or the art of delineating common forms and objects easily with the pencil, ought to be considered as necessary a part of education as the art of writing.

Drawing holds a middle rank between painting and writing, and possesses some of the advantages of both. It is a kind of graphic short hand, presenting to the eye the characteristic features of a landscape or of an object, and giving that precise kind of information which no written description can convey.

The power of thus expressing ideas by means of lines is not difficult to attain ; it is, in fact, little more than mechanical, requiring in the first instance scarcely anything beyond good models for imitation, and a few simple rules for the guidance of the eye and hand.

Drawing is a ready handmaid to all scientific study, illus-

trating its axioms, recording its phenomena, and explaining its laws. In the shop, in the factory, in trades and manufactories, it is as indispensable as language itself; it is as ready as the tongue and more descriptive than the pen—it is, in truth, the only universal language.

The course in drawing extends through four years. During the first year the students practice linear and freehand drawing. In the second year the elementary principles of instrument drawing, embracing a course of orthographic and isometrical projections, shades and shadows, structural drawing and topographical delineation is taught. This course is obligatory on all.

During the third and fourth years, instruction in drawing is obligatory only on the students in Civil Engineering. In the former year the system of instruction embraces orthographic projections, isometric drawing, shades and shadows, tinting in india ink and colors, the practice of drawing in sketches of tools, the finished work of machines, bridges and other structures. In the last, or fourth year of the Course in Engineering, the students are taught perspective. They then cease to draw for mere practice, and use their graphical skill in machine construction, in making drawings of works visited in excursions to mines, furnaces, water, gas and railway structures. Plans, profiles and sections of railroad surveys complete the course.

Drawing Instruments.—The instruments used at the College are the Swiss, which are preferred for their general excellence and moderate cost. The instruments, with the materials for geometrical and topographical drawing, cost from ten to twenty-five dollars. The student is advised to defer his purchases of drawing-instruments and materials until he comes to the College, when he will have the advantage of procuring them under the direction of the Professor of Drawing.

DISCIPLINE.

Military science and tactics are required to be taught in this Institution, both by law of Congress and by act of the State Legislature. The discipline will be modeled after that

of the best military schools. The government of the College is administered by the President, Commandant and Faculty, in accordance with a Code of Laws and Regulations enacted by the Trustees and published; each student upon matriculating being furnished with a copy.

The strictest attention to study, and the most exact punctuality in attendance on recitations, and all other duties, will be made the *condition* of every student's continuance at the College; and any student who, without authority, absents himself from recitation or any other duty, deserts his class, or refuses to attend when warned, shall be dismissed, or less severely punished, at the discretion of the Faculty.

Students are prohibited, under penalty of dismissal, from having in their possession ammunition, weapons or arms not issued for the performance of military duty; nor shall these be kept loaded in quarters under any pretext.

Students are prohibited entering into combinations under any pretext. One who shall begin, excite, cause or join in any boisterous or riotous conduct, or becomes a party to any agreement to avoid or violate any regulation, to hold no intercourse with a comrade, or to do any act to the prejudice of good order and military discipline, shall be dismissed.

No student shall have in his possession, or play at, cards, or games of chance, engage in a raffle, or in any manner wager money or other things, on penalty of dismissal.

Permission to attend private parties, or places of public amusements, will not be granted during the term.

No cadet will be granted a leave of absence more than five times *during a term of twenty weeks*. No cadet will be granted a leave of absence from study which interferes with his attendance on recitation, except on the application of the parent or guardian, addressed directly to the Commandant, and not through the cadet.

A student who shall drink, or bring, or cause to be brought within the cadet's limits, or have or allow in his room, tent, or otherwise in his possession, any fermented or intoxicating liquor, or fruits or viands preserved in intoxicating liquor, shall be dismissed.

A student who shall cut, mark, or otherwise injure or deface the buildings, furniture or appurtenances; the trees, shrubbery, green-sward, grounds, fences, stables, or out-houses; or who shall lose, injure, destroy, or improperly dispose of the arms, accoutrements, or other property of the College, shall make good all damage, and be dismissed or otherwise punished, according to the nature of the offense.

A student who is discharged, dismissed or suspended, must leave the college grounds immediately. Should he continue to wear the uniform, the fact that he is no longer a member of the college may be published.

Any student who shall overstay a leave of absence, must produce satisfactory evidence of his having been detained by sickness, by his parent or guardian, or by some unavoidable cause, otherwise he will be dismissed, or otherwise punished.

Day scholars detained at home from any cause, must render written excuse, approved by parent, guardian or physician, setting forth substantial reasons satisfactory to the Commandant, for the detention, otherwise their reports will not be excused.

To each recorded delinquency a number of from one to ten proportional to the degree of the offense in a moral and military view, is assigned to express demerit.

If any student receives 150 demerits for the whole or any part of a half year, or 250 for a greater period, he shall be declared deficient and dismissed.

RELIGIOUS SERVICES.

Religious services are held every morning in the chapel.

The students are required to attend these exercises, and are expected to attend the church of their choice at least once on Sunday. Opportunities are also offered for attending Bible classes every Sunday.

By statute of the State the sale of spirituous liquors and keeping of gaming saloons of every kind, within five miles of Auburn, are forbidden.

The College will be carefully preserved from the control or domination of any party or sect in religion or politics.

LOCATION AND BUILDING.

The College is situated in the town of Auburn, sixty miles from Montgomery, directly on the line of the Western Railroad.

The region is high and healthful, 821 feet above tide water, being more elevated than Montgomery by 659 feet, or than Talladega by 200 feet.

The building is large and commodious, and is well furnished with rooms for college use.

The first story of the building has been fitted with Peard's No. 1 desks; the entire building has been under-drained and nine additional comfortable and well lighted rooms added for college use the present year.

CHEMICAL LABORATORY.

The Chemical Laboratory has been recently transferred to first floor and admirably fitted up for work in Analysis. It consists of a Lecture Room, (nicely fitted up with counters, Pneumatic Trough, Gasometer, and large glass cases,) a Work Room, with twenty-five work tables, a Furnace Room, and a Balance Room. All are furnished with *Gas and Water*. Every student pursuing Analytical Chemistry is provided with a separate work table, the necessary chemicals and apparatus, a jet of gas with Bunsen's burners, and enameled water sinks. In the Balance Room are Balances made by Oertling, of London, and Becker, of New York.

APPARATUS, CABINET AND MUSEUM.

The apparatus, both chemical and philosophical, is already extensive, and additions are being made thereto. The Cabinet of Minerals is very comprehensive. The Museum is small, but contains many rare and valuable specimens. It, too, is receiving additions. Natural Science, in all its branches, receives particular attention, and every facility in

the way of experiment and illustration is offered to the student.

We earnestly request the citizens of the State to forward to the Professor of Mineralogy and Geology any specimens which may be useful in the geological study of Alabama.

By a recent act of the legislature, appointing a State Geologist, it is made imperative upon him to furnish this Institution a full suit of all the minerals of the State, thus giving a prospective increase to our already valuable cabinet, and by which the geology of Alabama may be fully illustrated.

DRAWING ROOM.

A Drawing Room, 24 × 41 × 17 feet, has been fitted up with all necessary arrangements. A full set of geometrical models is provided. A large number of photographs, lithographs and manuscript drawings, English, German and French, have been imported during the past year. They illustrate the following subjects:—General Descriptive Geometry, Linear Perspective, Shades, Shadows and Reflections, Masonry and Stone Cutting, Girders and Trusses, of wood and iron. Furnaces, boilers, railroad shops, depots, offices, machines, and their details, shown in the conventional colors used in France and Germany.

A selection of portfolios in landscape, figure and classic subjects, and casts from the gallery of the Louvre in Paris, is calculated to meet the wants of students desiring to pursue a full course in free-hand drawing.

TELEGRAPHY.

A set of telegraphic apparatus, connecting the Professors' rooms and the offices in the college building, is in daily use. A class of operators receive regular instruction and will be prepared to take charge of telegraph offices on completing the course.

SOCIETIES.

There are two Literary Societies, the Wirt and the Websterian, connected with the College. Each has a commodi-

ous hall handsomely fitted up, a library of standard and miscellaneous works, and a reading room. Their weekly exercises add to the facilities afforded by the College for practice in composition, elocution and discussion.

SOCIETY OF ALUMNI.

The Annual Alumni Oration, by a member of the Society, is delivered in the Chapel, Tuesday evening of Commencement week.

YOUNG MEN'S CHRISTIAN ASSOCIATION.

This Association comprises the students who are members of churches. Its object is to promote the religious character and usefulness of those connected with it. Weekly meetings are held, and public addresses occasionally delivered.

O. C. McGEHEE, President.

G. H. PRICE, Corresponding Secretary.

BOARDING.

Students, after selecting their boarding-houses, with the approval of the Faculty, will not be permitted to make changes without first obtaining their permission.

Application will be granted only on good and sufficient reasons, or at the written request of the parent or guardian.

The Faculty will feel authorized to remove students from boarding-houses when it becomes manifest that they are failing in their duties from improper associations, or for any other reason demanding such removal.

Parents and guardians are advised to send all money for payment of tuition and board to the Treasurer of the College, with instructions for its appropriation.

EXPENSES.

Tuition free to all cadets in or out of the State.

Incidental fee, per term, in advance.....\$ 5.00

Surgeon fee..... 2.50

Diploma 5.00

Board, in private families, per month.....\$10 to 15

ACADEMIC YEAR.

The academic year, which is divided into two equal terms, commences on the last Wednesday in September and ends on the last Wednesday in June following. The second term begins on the second Wednesday in February.

PUBLIC EXERCISES.

The annual commencement takes place on the last Wednesday in June.

On Sunday preceding the day of commencement, a sermon is preached in the chapel by some Divine selected by the Faculty.

On Monday, the second day of commencement, there is a dress parade of the Corps of Cadets, on the College campus, at 6, p. m.

Monday evening is assigned for the exhibition of the Third Class Prize Declaimers.

The Second Class deliver original orations on Tuesday morning. An Agricultural Address is delivered in the forenoon. In the afternoon the Corps of Cadets is reviewed by the Governor and Board of Trustees. At 8, p. m., the Alumni Oration is delivered.

LIST OF DONATIONS.

Books and Documents, and other Donations, since the Last Report.—The Library has been placed upon the list to receive the publications of the Engineer Department of the United States Army. The Hon. Joseph Henry, Secretary of the Smithsonian Institute, has placed the Library on the list to receive the publications of that institution. The same courtesy has been extended to the College by Gen. Albert J. Myer, Chief Signal Officer United States Army; the Hon. Frederick Watts, Commissioner of Agriculture; the Secretaries of State, Treasury and Interior. The College has hereby received many valuable publications, including the Weather Reports of the Signal Bureau, Monthly Reports of Department of Agriculture, Maps of Surveys, Reports of United States Coast Survey, and Patent Office Gazette.

The College has also received a large and valuable supply of seeds from the Department of Agriculture for experimental use on the College farm.

LIST OF BOOKS, &c.—U. S. Engineer Department, 8 vols.

State Department	6	"
Coast Survey	4	"
Department of Interior	15	"
“ of War	3	"
“ of Agriculture	4	"
Signal Bureau	3	"
Smithsonian Institute	4	"
Hon. Jere. Williams	19	"
Hon. John T. Morgan	10	"
Hon. J. B. Gordon	2	"

Books have also been received from the following persons:

Hon. Rufus K. Boyd, Secretary of State—State Publications,

Hon. W. J. Davie, A. M., Commissioner of Agriculture, Kentucky—State Reports.

Hon. Thomas P. Janes, Commissioner of Agriculture, Georgia—State Reports.

The following have contributed to the Cabinet:

Dr. E. B. Johnson, Eufaula, Alabama.

Dr. Julien Ravenel, Charleston, South Carolina.

Rev. E. A. Van Hoose, Troy, Alabama.

Mr. William Lowther, Smith's Station, Alabama.

The following contributions have been received by the Agricultural Department:

Montgomery Oil Works, Montgomery, Alabama—One ton of cotton seed meal; one ton ash of cotton seed hulls.

Messrs. Edwards, Hudmon & Co., Opelika, Ala.—One sack Empire Guano.


Mr. A. H. Slaughter, Opelika, Ala.—One sack Stern's Am'd Dis. Bone.

Messrs. Walton, Whann & Co., Charleston, S. C.—Three sacks Whann's Rawbone Superphosphate.

Messrs. W. C. Bee & Co., Charleston, S. C.—Two sacks ground phosphate.

The following papers were sent free to the College Reading Room, by their publishers :

Greenville (Ala.) Advocate; Troy (Ala.) Enquirer; Massachusetts Plowman.

 Contributions to the Library and the Museum are earnestly solicited.

CALENDAR FOR 1878.

SUNDAY, June 23.

10 $\frac{1}{2}$ A. M.—Commencement Sermon, Rev. John C. Granberry, D. D.

8 P. M.—Address to Young Men's Christian Association.

MONDAY, June 24.

3 P. M.—Meeting of Board of Trustees.

6 P. M.—Dress Parade Corps.

8 P. M.—Declamation.....Third Class.

TUESDAY, June 25.

11 A. M.—Orations.....Second Class.

12 M.—Agricultural Address.

4 P. M.—Review of Corps.....by Governor.

6 P. M.—Dress Parade.....Corps.

8 P. M.—Alumni Address.....Rev. W. F. Glenn, A. M.

WEDNESDAY, June 26.

10 $\frac{1}{2}$ A. M.—Orations.....Graduating Class.

12 M.—Address to Societies.....Hon. Wm. J. Samford.

1 P. M.—Conferring Degrees.....President.

6 P. M.—Dress Parade.....Corps.

8 P. M.—Levee.

SESSION OF 1878-9.

First term begins Wednesday, September 25.

Second term begins Wednesday, February 12.